

L Number	Hits	Search T xt	DB	Time stamp
1	2922	(die n ar10 first near10 surfac n ar10 sec nd).ti,ab,clm.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/17 11:26
2	84	((die near10 first near10 surface near10 second).ti,ab,clm.) and ((heat or spreader or slug or heatsink) near5 second near5 surface near5 die)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/17 11:14
3	67	(((die near10 first near10 surface near10 second).ti,ab,clm.) and ((heat or spreader or slug or heatsink) near5 second near5 surface near5 die)) and ((heat or spreader or slug or heatsink) near5 second near5 surface near5 die).ti,ab,clm.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/17 11:16
4	33	(((die near10 first near10 surface near10 second).ti,ab,clm.) and ((heat or spreader or slug or heatsink) near5 second near5 surface near5 die)) and ((heat or spreader or slug or heatsink) near5 second near5 surface near5 die).ti,ab,clm.) and (encapsulant or epoxy or resin).ti,ab,clm.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/17 11:16
5	30	((((die near10 first near10 surface near10 second).ti,ab,clm.) and ((heat or spreader or slug or heatsink) near5 second near5 surface near5 die)) and ((heat or spreader or slug or heatsink) near5 second near5 surface near5 die).ti,ab,clm.) and (encapsulant or epoxy or resin).ti,ab,clm.) and ((die near10 first near10 surface near10 second)).clm.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/17 11:45
6	0	(substrate near50 surface near50 die near50 first near50 second near50 (heat or heatsink or spreader or slug) near50 (epoxy or resin or encapsulant)).clm.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/17 11:48
7	0	(substrate near100 surface near100 die near100 first near100 second near100 (heat or heatsink or spreader or slug) near100 (epoxy or resin or encapsulant)).clm.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/17 11:51
8	5	(substrate same surface same die same first same second same (heat or heatsink or spreader or slug) same (epoxy or resin or encapsulant)).clm.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/17 11:53
9	122	(heatsink or spreader r slug or h at) n ar5 (dir ctly) near5 (attached or b nded r attach or attaching or b nding or b nd) near5 (di)	USPAT; US-P PUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/17 11:56

10	30	((h atsink r spr ader r slug r heat) n ar5 (directly) near5 (attached r bonded or attach or attaching or bonding or b nd) near5 (di)) and (bga r ball).ti,ab,clm.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/17 11:58
11	37	((h at r h atsink or spread r or slug r sink) near5 (wire or wiring) near5 die).clm.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/17 12:02
12	13	((heat or heatsink or spreader or slug or sink) near5 (wire or wiring) near5 die).clm.) and (bga or ball)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/17 12:01
13	9	((heat or heatsink or spreader or slug or sink) near10 (wire or wiring) near10 die near10 (attached or bonded)).clm.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/17 12:04
14	7947	((heat or heatsink or spreader or slug or sink) near10 (attach or attaching or attached or bond or bonding or bonded) near10 (chip or die or ic))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/17 12:06
15	608	((heat or heatsink or spreader or slug or sink) near10 (directly or direct) near10 (attach or attaching or attached or bond or bonding or bonded) near10 (chip or die or ic))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/17 12:08
16	215	((heat or heatsink or spreader or slug or sink) near10 (directly or direct) near10 (attach or attaching or attached or bond or bonding or bonded) near10 (chip or die or ic))) and (bga or ball)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/17 12:11
17	34	((heat or heatsink or spreader or slug or sink) near10 (directly or direct) near10 (attach or attaching or attached or bond or bonding or bonded) near10 (chip or die or ic))) and (bga or ball)) and (((heat or heatsink or spreader or slug or sink) near10 (directly or direct) near10 (attach or attaching or attached or bond or bonding or bonded) near10 (chip or die or ic))).ti,ab,clm.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/17 12:11
18	101	(((heat or heatsink or spreader or slug or sink) near10 (directly or direct) near10 (attach or attaching or attached or bond or bonding or bonded) near10 (chip or die or ic))) and (bga or ball)) and (((h at or heatsink or spr ader or slug or sink) n ar10 (attach r attaching or attach d r b nd r b nding or b nded) near10 (chip r die r ic))).ti,ab,clm.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/17 12:11

19	53	(((((heat or heatsink or spr ad or slug or sink) near10 (directly or direct) near10 (attach or attaching or attached or bond or bonding or bonded) near10 (chip or die or ic)) and (bga or ball)) and (((heat or heatsink or spr ad or slug or sink) near10 (attach or attaching or attached or bond or bonding or bonded) near10 (chip or die or ic))).ti,ab,clm.) and (bga or ball).ti,ab,clm.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/17 12:14
20	180	(heatsink or slug or spreader or sink or heat).clm. and (bga or ball).ti,ab,clm. and (epoxy or resin or encapsulant).clm. and (wire or wiring or bondwire).clm. and (die or chip or ic).clm.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/17 12:16
21	100	((heatsink or slug or spreader or sink or heat).clm. and (bga or ball).ti,ab,clm. and (epoxy or resin or encapsulant).clm. and (wire or wiring or bondwire).clm. and (die or chip or ic).clm.) and ((wire or wiring) near10 (heat or sink or heatsink or spreader or slug))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/17 12:18
22	38	((heatsink or slug or spreader or sink or heat).clm. and (bga or ball).ti,ab,clm. and (epoxy or resin or encapsulant).clm. and (wire or wiring or bondwire).clm. and (die or chip or ic).clm.) and ((wire or wiring) near10 (heat or sink or heatsink or spreader or slug)).clm.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/17 12:20
23	24	((heatsink or slug or spreader or sink or heat).clm. and (bga or ball).ti,ab,clm. and (epoxy or resin or encapsulant).clm. and (wire or wiring or bondwire).clm. and (die or chip or ic).clm.) and ((wire or wiring) near10 (heat or sink or heatsink or spreader or slug)).clm.) and substrate.clm.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/17 12:21
24	1593	((heat or heatsink or slug or spreader or sink) same (directly or direct) same (die or chip or package or ic) same (epoxy or resin or encapsulate or encapsulated or encapsulating))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/17 12:27
25	466	((heat or heatsink or slug or spreader or sink) same (directly or direct) same (die or chip or package or ic) same (epoxy or resin or encapsulate or encapsulated or encapsulating))) and (cavity or (cavity near (up or down)) or cavity-up or cavity-down)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/17 12:28
26	209	(((heat or heatsink or slug or spreader or sink) same (directly or direct) same (die or chip or package or ic) same (epoxy or resin or encapsulate or encapsulated or encapsulating))) and (cavity or (cavity near (up or down)) or cavity-up or cavity-down)) and (bga or ball)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/17 12:30

27	119	(((((heat r h atsink r slug or spr ader or sink) same (directly r direct) same (die r chip r packag or ic) same (ep xy r resin or encasulate or encapsulated r encapsulating))) and (cavity r (cavity near (up or down)) r cavity-up r cavity-d wn)) and (bga or ball)) and (heat or heatsink or spreader or sink or slug).clm.	USPAT; US-P PUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/17 12:30
28	73	(((((heat or heatsink or slug or spreader or sink) same (directly or direct) same (die or chip or package or ic) same (epoxy or resin or encasulate or encapsulated or encapsulating))) and (cavity or (cavity near (up or down)) or cavity-up or cavity-down)) and (bga or ball)) and (heat or heatsink or spreader or sink or slug).clm.) and (epoxy or resin or encasulate or encapsulating or encapsulated).clm.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/17 12:26
29	57	(((((heat or heatsink or slug or spreader or sink) same (directly or direct) same (die or chip or package or ic) same (epoxy or resin or encasulate or encapsulated or encapsulating))) and (cavity or (cavity near (up or down)) or cavity-up or cavity-down)) and (bga or ball)) and (heat or heatsink or spreader or sink or slug).clm.) and (epoxy or resin or encasulate or encapsulating or encapsulated).clm.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/17 12:27
30	55	((((((heat or heatsink or slug or spreader or sink) same (directly or direct) same (die or chip or package or ic) same (epoxy or resin or encasulate or encapsulated or encapsulating))) and (cavity or (cavity near (up or down)) or cavity-up or cavity-down)) and (bga or ball)) and (heat or heatsink or spreader or sink or slug).clm.) and (epoxy or resin or encasulate or encapsulating or encapsulated).clm.) and substrate.clm.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/17 12:27
31	36	((((((heat or heatsink or slug or spreader or sink) same (directly or direct) same (die or chip or package or ic) same (epoxy or resin or encasulate or encapsulated or encapsulating))) and (cavity or (cavity near (up or down)) or cavity-up or cavity-down)) and (bga or ball)) and (heat or heatsink or spreader or sink or slug).clm.) and (epoxy or resin or encasulate or encapsulating or encapsulated).clm.) and substrate.clm.) and (wire or wiring)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/17 12:27

32	1603	((heat or heatsink or slug or spreader or sink or stiffener) same (directly or direct) same (die or chip or package or ic) same (epoxy or resin or encapsulate or encapsulated or encapsulating))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/17 12:28
33	471	((heat or heatsink or slug or spreader or sink or stiffener) same (directly or direct) same (die or chip or package or ic) same (epoxy or resin or encapsulate or encapsulated or encapsulating)) and (cavity or (cavity near (up or down)) or cavity-up or cavity-down)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/17 12:29
34	210	((heat or heatsink or slug or spreader or sink or stiffener) same (directly or direct) same (die or chip or package or ic) same (epoxy or resin or encapsulate or encapsulated or encapsulating)) and (cavity or (cavity near (up or down)) or cavity-up or cavity-down) and (bga or ball)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/17 12:30
35	106	((heat or heatsink or slug or spreader or sink or stiffener) same (directly or direct) same (die or chip or package or ic) same (epoxy or resin or encapsulate or encapsulated or encapsulating)) and (cavity or (cavity near (up or down)) or cavity-up or cavity-down) and (bga or ball) and (heat or heatsink or spreader or sink or slug or stiffener).ab.clm.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/17 12:33
36	37	((heat or heatsink or slug or spreader or sink or stiffener) same (directly or direct) same (die or chip or package or ic) same (epoxy or resin or encapsulate or encapsulated or encapsulating)) and (cavity or (cavity near (up or down)) or cavity-up or cavity-down) and (bga or ball) and (heat or heatsink or spreader or sink or slug or stiffener).ab.clm.) and ((wire or wiring) and (substrate)).clm.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/17 12:31
37	28	((heat or heatsink or slug or spreader or sink or stiffener) same (directly or direct) same (die or chip or package or ic) same (epoxy or resin or encapsulate or encapsulated or encapsulating)) and (cavity or (cavity near (up or down)) or cavity-up or cavity-down) and (bga or ball) and (heat or heatsink or spreader or sink or slug or stiffener).ab.clm.) and ((wire or wiring) and (substrate)).clm.) and (epoxy or resin or encapsulate or encapsulated or encapsulating).clm.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/17 12:31

38	1492375	(heat or heatsink or spreader or sink or slug or stiffener).ab.clm.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/17 12:34
39	55686	(heatsink or spreader or (heat near sink) or slug or stiffener).ab.clm.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/17 12:36
40	1027	((heatsink or spreader or (heat near sink) or slug or stiffener).ab.clm.) and (epoxy or resin or encapsulate or encapsulated or encapsulating).clm.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/17 12:35
41	3768	((heatsink or spreader or (heat near sink) or slug or stiffener).ab.clm.) and (epoxy or resin or encapsulate or encapsulated or encapsulating).ab.clm.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/17 12:35
42	1027	((heatsink or spreader or (heat near sink) or slug or stiffener).ab.clm.) and (epoxy or resin or encapsulate or encapsulated or encapsulating).clm.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/17 12:35
43	441	((heatsink or spreader or (heat near sink) or slug or stiffener).ab.clm.) and (epoxy or resin or encapsulate or encapsulated or encapsulating).clm.) and (epoxy or resin or encapsulate or encapsulated or encapsulating).ab.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/17 12:36
44	343	((heatsink or spreader or (heat near sink) or slug or stiffener).ab.clm.) and (epoxy or resin or encapsulate or encapsulated or encapsulating).clm.) and (epoxy or resin or encapsulate or encapsulated or encapsulating).ab.) and (heatsink or spreader or (heat near sink) or slug or stiffener).clm.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/17 12:36
45	343	((heatsink or spreader or (heat near sink) or slug or stiffener).ab.clm.) and (epoxy or resin or encapsulate or encapsulated or encapsulating).clm.) and (epoxy or resin or encapsulate or encapsulated or encapsulating).ab.) and (heatsink or spreader or (heat near sink) or slug or stiffener).clm.) and (heatsink or spreader or (heat near sink) or slug or stiffener).ab.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/17 12:36

46	100	(((((heat sink or spreader or (heat near sink) or slug or stiffener).ab.clm.) and (epoxy or resin or encapsulate or encapsulated or encapsulating).clm.) and (epoxy or resin or encapsulate or encapsulated or encapsulating).ab.) and (heatsink or spreader or (heat near sink) or slug or stiffener).clm.) and (heatsink or spreader or (heat near sink) or slug or stiffener).ab.) and (wire or wiring).clm.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/17 12:37
47	47	(((((heatsink or spreader or (heat near sink) or slug or stiffener).ab.clm.) and (epoxy or resin or encapsulate or encapsulated or encapsulating).clm.) and (epoxy or resin or encapsulate or encapsulated or encapsulating).ab.) and (heatsink or spreader or (heat near sink) or slug or stiffener).clm.) and (heatsink or spreader or (heat near sink) or slug or stiffener).ab.) and (wire or wiring).clm.) and (bga or ball).	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/17 12:37
48	19	5977626.URPN.	USPAT	2003/01/17 13:31
49	3	("4692791" "5311059" "5371404").PN.	USPAT	2003/01/17 13:35
50	1	("6504723").PN.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/17 13:38
51	2	("6163458").PN.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/17 13:39
52	3	("6400014").PN.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/17 13:39
53	2	("4692791").PN.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/17 13:40
54	2	("6433420").PN.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/17 13:41
55	1	("6507104").PN.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/17 13:41

56	2	("5977626").PN.	USPAT; US-PGPUB; EPO; JP ; DERWENT; IBM_TDB	2003/01/17 13:44
57	2	("5616957").PN.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/17 13:45
58	2	("5552635").PN.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/17 13:45
75	9	(US-6504723-\$ or US-6163458-\$ or US-6400014-\$ or US-4692791-\$ or US-6433420-\$ or US-6507104-\$ or US-5977626-\$ or US-5616957-\$ or US-5552635-\$).did.	USPAT	2003/01/17 13:59
78	0	((I75 and (" or ("(conducting or conductive) near (adhesive))").PN.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/17 14:00
79	1	((US-6504723-\$ or US-6163458-\$ or US-6400014-\$ or US-4692791-\$ or US-6433420-\$ or US-6507104-\$ or US-5977626-\$ or US-5616957-\$ or US-5552635-\$).did.) and ((conducting or conductive) near (adhesive))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/17 14:02
80	9	((conducting or conductive) near2 (adhesive) near2 (heatsink or spreader or slug or stiffener) near2 (chip or die or ic))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/17 14:06
81	5	(((conducting or conductive) near2 (adhesive) near2 (heatsink or spreader or slug or stiffener) near2 (chip or die or ic))) and (bga or ball)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/17 14:06
83	5	(((conducting or conductive) near3 (adhesive) near3 (heatsink or spreader or slug or stiffener) near3 (chip or die or ic))) and (bga and ball)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/17 14:08
82	17	((conducting or conductive) near3 (adhesive) near3 (heatsink or spreader or slug or stiffener) near3 (chip or die or ic))	USPAT; US-PGPUB; EPO; JP ; DERWENT; IBM_TDB	2003/01/17 14:08

94	10	(US-6504723-\$ r US-6163458-\$ r US-6400014-\$ or US-4692791-\$ r US-6433420-\$ or US-6507104-\$ r US-5977626-\$ or US-5616957-\$ r US-5552635-\$ r US-6008991-\$).did.	USPAT	2003/01/17 14:11
97	0	((US-6504723-\$ or US-6163458-\$ r US-6400014-\$ or US-4692791-\$ or US-6433420-\$ or US-6507104-\$ or US-5977626-\$ or US-5616957-\$ or US-5552635-\$ or US-6008991-\$).did.) and (method or process).clm.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/17 14:11
98	33791	(spreader or sink or heatsink or slug or stiffener).ti.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/17 14:12
99	24733	((spreader or sink or heatsink or slug or stiffener).ti.) and (spreader or sink or heatsink or slug or stiffener).ab.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/17 14:12
100	2794	((spreader or sink or heatsink or slug or stiffener).ti.) and (spreader or sink or heatsink or slug or stiffener).ab.) and (spreader or sink or heatsink or slug or stiffener).clm.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/17 14:12
101	729	((((spreader or sink or heatsink or slug or stiffener).ti.) and (spreader or sink or heatsink or slug or stiffener).ab.) and (spreader or sink or heatsink or slug or stiffener).clm.) and (method or process).clm.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/17 14:19
102	144	(((((spreader or sink or heatsink or slug or stiffener).ti.) and (spreader or sink or heatsink or slug or stiffener).ab.) and (spreader or sink or heatsink or slug or stiffener).clm.) and (method or process).clm.) and (bga or ball)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/17 14:19
103	88	(((((spreader or sink or heatsink or slug or stiffener).ti.) and (spreader or sink or heatsink or slug or stiffener).ab.) and (spreader or sink or heatsink or slug or stiffener).clm.) and (method or process).clm.) and (bga or ball)) and adhesive	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/17 14:19
104	72	((((((spreader or sink or heatsink or slug or stiffener).ti.) and (spreader or sink or heatsink or slug or stiffener).ab.) and (spreader or sink or heatsink or slug or stiffener).clm.) and (method or process).clm.) and (bga or ball)) and adhesive) and (proxy or resin encapsulant)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/17 14:20

105	58	((((((((spreader or sink or heatsink or slug or stiffener).ti.) and (spreader or sink or heatsink or slug or stiffener).ab.) and (spreader or sink or heatsink or slug or stiffener).clm.) and (method or process).clm.) and (bga or ball)) and adhesive) and (epoxy or resin or encapsulant)) and substrate	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/17 14:20
106	14	((((((((spreader or sink or heatsink or slug or stiffener).ti.) and (spreader or sink or heatsink or slug or stiffener).ab.) and (spreader or sink or heatsink or slug or stiffener).clm.) and (method or process).clm.) and (bga or ball)) and adhesive) and (epoxy or resin or encapsulant)) and substrate) and ((direct or directly) near5 (slug or spreader or sink or heatsink or stiffener) near5 (die or chip or ic))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/17 14:25
107	6	((((((((spreader or sink or heatsink or slug or stiffener).ti.) and (spreader or sink or heatsink or slug or stiffener).ab.) and (spreader or sink or heatsink or slug or stiffener).clm.) and (method or process).clm.) and (bga or ball)) and adhesive) and (epoxy or resin or encapsulant)) and substrate) and ((direct or directly) near5 (slug or spreader or sink or heatsink or stiffener) near5 (die or chip or ic))) and (direct or directly).clm.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/17 14:25